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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-------------------------|---------------------|------------------|
| 10/721,829  | 11/24/2003  | Michael Barth Venturino | KCX-669 (19587)     | 4748             |
| 22827   | 7590        | 03/09/2005              | EXAMINER            |                  |
| DORITY & MANNING, P.A.<br>POST OFFICE BOX 1449<br>GREENVILLE, SC 29602-1449 |             |                         | HILL, LAURA C       |                  |
|   |             |                         | ART UNIT            | PAPER NUMBER     |
|   |             |                         | 3761                |                  |
| DATE MAILED: 03/09/2005   |             |                         |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                  |  |
|------------------------------|-------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/721,829 | Applicant(s)<br>VENTURINO ET AL. |  |
|                              | Examiner<br>Laura C. Hill     | Art Unit<br>3761                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 63-82 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 63-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06-23-03, 11-24-03 & 1-10-05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>All enclosed 5/14/04, 9/27/04, 10/13/04</u><br><u>11/10/04, 1/5/05</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Lateral Flap Structure of Folded Absorbent Product.

### ***Election/Restrictions***

Claims 34-62 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10 January 2005.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 63-64 and 72-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Mesek (US 4,960,477). Regarding claims 63-64 and 72 the Mesek reference discloses absorbent disposable diaper 10 with a outer cover layer 16, facing layer/liner 12 and absorbent batt 14 sandwiched between these two layers; absorbent structure having a front, rear and middle portion with the middle portion being narrower than the front portion; a pair of opposing lateral side flap portions 26 extending substantially the entire length of the absorbent and connected to medial portion 28; side

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flap portions 26 defined by lines of cutting 30/first and second slits and side flap portions 26 being folded onto the front, middle and rear portions of absorbent diaper 10 (col. 7, ll. 4-12, 30-32, 42-46 and fig. 2).

Regarding claims 73-75 the Mesek reference discloses an absorbent batt 14 of disposable diaper 10 with a densified paper-like skin containing a web interface with a quantity of superabsorbent material (col. 4, ll. 1-3, ll. 52-60). The web interface of the absorbent is capable of being air-formed since the Mesek reference discloses an absorbent batt with the same structure and since the process of making the web is given little patentable weight.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1-14, 16, 21-24, 32-33, 65-70 and 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesek ('477). Regarding claims 1 and 21 the

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Mesek reference discloses absorbent disposable diaper 10 with a outer cover layer 16, facing layer/liner 12 and absorbent batt 14 sandwiched between these two layers; absorbent structure having a front, rear and middle portion with the front portion having a width; a pair of lateral side flap portions 26 at opposite sides easily folded to overlap one another on a medial portion 28; and medial portion 28 having the substantially the same dimension of side flaps 26 but does not disclose flaps that extend beyond the width of the front portion (col. 7, ll. 4-12, 30-32, 42-46 and fig. 2). It would be obvious to one of ordinary skill in the art at the time the invention was made that the flaps extend beyond the width of the front portion since this structure offers no additional benefit over the prior art. It would also be obvious to one of ordinary skill in the art at the time the invention was made that the flaps have a width adjacent to the middle portion that is a percentage of the width of the middle portion since the Mesek structure is capable of easily overlapping and folding over the absorbent article as specified.

Regarding claims 2-3 the Mesek reference discloses absorbent batt 14 with relatively wide end portions 20, 22 connected by a relatively narrow central/middle portion 24 (col. 7, ll. 24-26).

Regarding claims 4-5 the Mesek reference discloses side flap sections 26 of batt 14 that fold into an overlapping relationship with one another with compacted layers 26a, 26b and 28a to provide a reservoir for increased liquid storage capacity in the central or crotch region of the diaper but does not disclose the flap width percentages (col. 8, ll. 64-67 and col. 9, ll. 20-23). It would be obvious to one of ordinary skill in the art at the time the invention was made that each of the flaps has a width adjacent to the middle portion

that is in the ranges claimed since the Mesek reference side flap sections overlap one another and increase absorbent capacity.

Regarding claims 6-7 and 11 the Mesek reference discloses absorbent diaper 10 with an hourglass-like shape wherein the lateral flaps 26 extend substantially and only a portion of the length of the absorbent structure with the flaps 26 folding onto the front, middle and rear portions (fig. 2).

Regarding claims 8-9 the Mesek reference discloses absorbent batt 14 with relatively wide end portions 20, 22 connected by a relatively narrow central/middle portion 24 as discussed in rejected claims 2-3.

Regarding claim 10 the Mesek reference discloses lateral flaps 26 as discussed in claim 1 but does not disclose that the widest section is adjacent the middle portion of absorbent diaper 10. It would be obvious to one of ordinary skill in the art at the time the invention was made that the lateral flaps have the widest section adjacent the middle portion since the Mesek flaps have enhanced folding capabilities and since the claimed structure offers no additional benefit over the prior art.

Regarding claims 12-13 the Mesek reference discloses absorbent diaper 10 with a longitudinal axis/side edge extending from the front to rear portion and side flap portions 26 defined by lines of cutting 30/first and second slits which are parallel to one another and are substantially perpendicular in a diagonal direction to the longitudinal axis but is lacking the lateral flaps being widest adjacent the middle portion as discussed in rejected claim 10 (col. 7, ll. 32-37 and fig. 2). It would be obvious to one of ordinary skill

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in the art at the time the invention was made to modify the slit structure with flap width since the Mesek reference discloses the same slit structure claimed.

Regarding claims 14 and 16 the Mesek reference discloses cutting lines 30/first and second slits may be disposed at an angle with respect to one another and with respect to the side edges of absorbent batt 14 and may be curved if desired (col. 7, ll. 37-40). It would be obvious to one of ordinary skill in the art at the time the invention was made that the slits extend from a side edge/longitudinal axis in a diagonal direction or non-linear fashion since the Mesek reference discloses this cutting line/slit structure and since no additional benefit is obtained from this slit configuration over the prior art.

Regarding claims 22-24 the Mesek reference discloses the absorbent batt 14 of disposable diaper 10 with a densified paper-like skin containing a web interface with a quantity of superabsorbent material (col. 4, ll. 1-3, ll. 52-60). The web interface of the absorbent is capable of being air-formed since the Mesek reference discloses an absorbent batt with the same structure and since the process of making the web is given little patentable weight.

Regarding claims 32-33 the Mesek reference discloses side flaps 26 are folded into an overlapping relationship with one another to provide an absorbent unit with three layers in the central region of absorbent diaper 10 for desired wicking and increased strength (col. 4, ll. 23-27).

Regarding claims 65-67 the Mesek reference discloses Mesek reference discloses side flap sections 26 of batt 14 that fold into an overlapping relationship with one another with compacted layers 26a, 26b and 28a to provide a reservoir for increased

liquid storage capacity in the central or crotch region of the diaper but does not disclose the flap width percentages as discussed in rejected claims 4-5. It would be obvious to one of ordinary skill in the art at the time the invention was made that each of the flaps has a width adjacent to the middle portion that is in the ranges claimed since the Mesek reference side flap sections overlap one another and increase absorbent article capacity.

Regarding claim 68 the Mesek reference discloses absorbent diaper 10 with a longitudinal axis/side edge extending from the front to rear portion and side flap portions 26 defined by lines of cutting 30/first and second slits which are parallel to one another and are substantially perpendicular in a diagonal direction to the longitudinal axis but is lacking the lateral flaps being widest adjacent the middle portion as discussed in rejected claims 12-13 (col. 7, ll. 32-37 and fig. 2). It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the slit structure with flap width since no additional functional benefit is gained from the slit structure over the prior art.

Regarding claim 69 the Mesek reference discloses lateral flaps 26 as discussed in claim 1 but does not disclose that the widest section is adjacent the middle portion of absorbent diaper 10. It would be obvious to one of ordinary skill in the art at the time the invention was made that the lateral flaps have the widest section adjacent the middle portion since the Mesek flaps have enhanced folding capabilities and since the claimed structure offers no additional benefit over the prior art.

Regarding claim 70 the Mesek reference discloses absorbent diaper 10 having a rectangular shape in an unfolded shape (fig. 1).



Regarding claim 76-77 the Mesek reference discloses side flaps 26 are folded into an overlapping relationship with one another to provide an absorbent unit with three layers in the central region of absorbent diaper 10 for desired wicking and increased strength but does not disclose which portion the layers are located in (col. 4, ll. 23-27). It would be obvious to one of ordinary skill in the art at the time the invention was made that the center area of the rear portion comprise at least two layers of material while the two opposing lateral areas of the rear portion comprise only a single layer of material since the Mesek reference has multiple layers with enhanced absorption properties and since the claimed structure offers no additional benefits over the prior art.

3. Claims 15, 17-20, 25 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesek ('477) as applied to claims 1 and 63 in view of Endres et al. (US 5,527,302). Regarding claims 15 and 17-20 the Mesek reference discloses the absorbent diaper 10 as discussed in rejected claim 1 but does not expressly disclose a basis weight when the absorbent article is in an unfolded state. The Endres et al. reference discloses absorbent diaper 10 with containment flaps 58 attached to upper surface of topsheet 26 (col. 3, ll. 66-67 and col. 7, ll. 29-31). The Endres et al. reference further discloses each containment flap 58 comprises a single layer having a basis weight of about 0.4 ounces per square yard but does not disclose if the basis weight is uniform in an unfolded state (col. 8, ll. 30-31). It would be obvious to one of ordinary skill in the art at the time the invention was made that the basis weight be uniform or non-uniform in the portions claimed since side flaps of Mesek and Endres et al. function to fold over the absorbent article to prevent side leakage. Furthermore, it would be obvious

to one would be of ordinary skill in the art at the time the invention was made that the side flaps have the basis weight claimed since the side flaps described above would be capable of reducing waste during production.

Regarding claim 25 the Mesek reference discloses absorbent structure as discussed in rejected claim 1 but does not disclose basis weight. The Endres et al. reference discloses absorbent structure 14 as discussed in rejected claim 15 which can contain surge and retention portions 98 and 100 with the retention portion 100 having a basis weight of 200-3000 gsm (col. 10, ll. 65-66 and 53-55). It would be obvious to one would be of ordinary skill in the art at the time the invention was made that the absorbent have a basis weight in the range claimed since both references have structures with lateral flaps discussed above with enhanced absorption characteristics.

Regarding claim 71 the Mesek reference discloses absorbent structure as discussed in rejected claim 63 but does not disclose basis weight. The Endres et al. reference discloses absorbent structure 14 as discussed in rejected claim 15 which can contain surge and retention portions 98 and 100 with the retention portion 100 having a basis weight of 200-3000 gsm (col. 10, ll. 65-66 and 53-55). It would be obvious to one would be of ordinary skill in the art at the time the invention was made that the absorbent have a basis weight in the range claimed since both references have structures with lateral flaps discussed above with enhanced absorption characteristics.

4. Claims 26-31 and 78-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mesek ('477) as applied to claims 1 and 63 in view of Endres et al. ('302) in further view of Carr et al. (US 5,462,537). Regarding claims 26-31 the Mesek

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reference discloses the absorbent diaper 10 as discussed in rejected claim 1 but does not expressly disclose a differential basis weight in the front, middle and rear portions when the absorbent article is in a folded state. The Endres et al. reference discloses absorbent structure 14 as discussed in rejected claim 25 which can contain surge and retention portions 98 and 100 with the retention portion 100 having a basis weight of 200-3000 gsm but does not expressly disclose these basis weights being different in different portions. The Carr et al. reference discloses absorbent article 2 with target area 10 that may overlap/be folded onto crotch area 8 (col. 2, ll. 53-54). The Carr et al. reference further discloses central zone 18/middle portion has a higher average basis weight of absorbent material than end portions 4,6 and side portions 20 to rapidly absorb fluids (col. 3, ll. 21-23 and 49-50). The Carr et al. reference further discloses because of an increasing capillary force resulting from increasing densities between central zone 18 and end portions 4,6 transfers liquid from the lower density to higher density area (col. 3, ll. 50-54). The Carr et al. reference does not disclose the value of this basis weight differential in the front and rear portions. It would be obvious to one would be of ordinary skill in the art at the time the invention was made to have different portions with differential basis weights having the ranges claimed since the combined references contain flaps and absorbent articles which enhance absorbent capacity through basis weight properties.

Regarding claims 78-82 the Mesek reference discloses the absorbent diaper 10 as discussed in rejected claim 63 but does not expressly disclose a basis weight when the absorbent article is in an unfolded state. The Endres et al. reference discloses

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absorbent diaper 10 having a basis weight of about 0.4 ounces per square yard as discussed in rejected claim 25 but does not disclose the basis weight value or uniformity in an unfolded state. The Carr et al. reference discloses differential basis weights in different portions of the absorbent article as discussed in rejected claims 26-31 but does not expressly specify if the differential basis weights are in an unfolded or folded state. It would be obvious to one of ordinary skill in the art at the time the invention was made that the basis weight be uniform or non-uniform in an unfolded state in the portions claimed since side flaps of Mesek and Endres et al. fold over the absorbent article to prevent side leakage. Furthermore, it would be obvious to one would be of ordinary skill in the art at the time the invention was made that the side flaps located within the absorbent web have the basis weight claimed in a folded or unfolded state since the state offers no advantage over the prior art.

### ***Double Patenting***

Claims 2, 6, 7, 12, 21, 23, 24, 25 and 32 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 3, 7, 49, 15 and 5; 16 and 52; 17 and 53; 54, and 1 and 43 of copending Application No. 10/721834. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Merry reference, US patent no. 4,519,800, is cited for showing a reusable diaper formed by cutting a central portion of each side to forms

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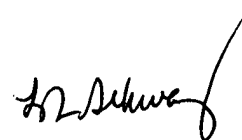
flaps which are folded over the middle section and are stitched thereto providing a crotch portion of increased moisture absorbing capacity. The Wolfe reference, US patent no. 4,795,453, is cited for showing a pad with slits forming flaps that are folded on the center to form a dog-bone shape absorbent with a thicker middle bridge portion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on 571-272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill  
Examiner  
Art Unit 3761



LCH



Larry I. Schwartz  
Supervisory Patent Examiner  
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